

Just-In-Time Logistics

Subject Area Logistics

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Just-In-Time Logistics  
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Logistics modernization, end-to-end logistics, logistics transformation, and just-in-time logistics; whichever name it is being called today, it is coming and is changing how Marines will receive logistical support in the future. Many continue to ask "why the need for change", and why is the Marine Corps placing this transformation so high on the priority list, side by side with the Expeditionary Fighting Vehicle (EFV)? For years "just-in-case" logistics has been the Marine Corps' primary supply practice, but with better processes and systems, and more education and demonstrations on what these systems will do for the end user, consumer confidence will boost and "just-in-time" logistics will be the lighter and leaner combat logistics support the Marine Corps has desperately needed.

### **Pros and Cons of each System**

Plainly stated by the former Under Secretary of Defense for Acquisition, Technology and Logistics, Jacques S. Gansler, "[just-in-time logistics] refers to getting resources to a battlefield when needed rather than building large stockpiles." <sup>1</sup> A "just-in-case" system lacks the confidence in the supply system itself therefore the Operational Force units take it upon themselves to bring much more than is needed, "just-in-case."

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<sup>1</sup>Jacques Gansler "Gansler: DOD needs a new model for logistics Support," *Armed Forces Newswire Service* July 1999: 1.

Marines utilize the "just-in-case" planning formula and plan for the worst case scenario no matter the situation: CAX, WTI, Cobra Gold, and especially real world operations. This planning leads to a waste of fiscal and logistical resources. The downside to this system however, is that the amount of money to bring all the "in-case" items is astronomical. The main benefit to a just-in-case supply system is that using it can reduce the risk of not having an item or asset when it is needed; as Marine leadership can be heard saying, "Bring the iron mountain; I am sure we will need some of it." Mr. Gansler, former Under Secretary of Defense AT&L stated, "Streamlining and modernizing government supply chains can be expected to result in substantial cost savings as well as delivery-time improvements...even a 10 percent savings would free up \$8 billion annually for other pressing needs..."<sup>2</sup> Before Operation Enduring and Iraqi Freedom, Mr. Gansler stated, "...the government spends about \$82 billion a year on logistics support and employs about twice as many people in uniform involved in logistics as it does on personnel in command in combat roles...it's an incredibly large tail on our system."<sup>3</sup> A typical Marine infantry battalion has limited funds to pay for training, and day-to-day functioning to include logistical support. Each unit received

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<sup>2</sup>Jacques Gansler & Robert Luby, "Transforming Government Supply Chain Management," *Army AL&T* Jul/Aug (2003): 102

<sup>3</sup>Jacques Gansler & Robert Luby, "Transforming Government Supply Chain Management," *Army AL&T* Jul/Aug (2003): 102

Operation and Maintenance (O&M, M) funds from the Department of Defense via Headquarter Marine Corps. The total requested in Operation & Maintenance funds on the FY 06 National Defense Budget Authority was \$147 billion compared to FY 04's request for \$177 billion and this compared to the pre OIF budgets such as the FY 00 requesting just over \$100 billion<sup>4</sup>. This is very telling since the Armed Forces receive their logistical support funding from these O&M funds. Justifying the necessity to change how business has been conducted for so many years, the former Deputy Commandant of Installation and Logistics, Lieutenant General Richard L. Kelly, sees the change in logistics processes and systems as crucial to the Marine Corps' future:

"Logistics modernization is about substantially improving Marine Air-Ground Task Force (MAGTF) lethality and effectiveness. Period... It is not about saving money or people; it is not about efficiency at the expense of effectiveness; it is not 'just-in-time' logistics. We are continuing to shape our modernization initiatives, but we are maintaining a laser focus at the tactical level while using the rich body of lessons learned and relearned."<sup>5</sup>

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<sup>4</sup> U.S. Department of Defense, Office of the Under Secretary of Defense (Comptroller) March 1999 & February 2005 (Washington D.C.)

<sup>5</sup> Richard L. Kelly, LtGen (Ret.) "Logistics Modernization :Lethality and Effectiveness." *Marine Corps Gazette* August (2005): 16-19

## **Building Warriors' Confidence**

The current stove-piped logistics systems have done little to build customer or "warrior confidence". Customers who requesting assets from the supply system have become used to waiting thirty plus days to receive the asset. Consumers outside of the Marine Corps would refuse to accept such delays, but within the Marine Corps, the current system offers no alternatives. LtGen. Kelly and his staff began to correct this problem in 2003. The Logistics Modernization (LogMod) projects such as the Global Combat Support System-Marine Corps (GCSS-MC)<sup>6</sup>, will re-build the confidence of the tactical end user, so he will know that his order will arrive to his location in a much more reasonable time frame. He will no longer feel the need for the "home grown" iron mountain brought with him, nor the need for four or six extra quadruple containers or QuadCons full of extra repair parts and other supplies.

## **The Solution: Logistics Modernization**

The Marine Corps realized that the old systems such as Supported Activities Supply System (SASSY), Assets Tracking Logistics and Supply System (ATLASS) and its II MEF predecessor ATLASS II+ or the Marine Corps Integrated Maintenance Management System (MIMMS) are outdated and need to be replaced. The Marine

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<sup>6</sup>Randy F. Delarm & LtCol Ronald Eckert, "GCSS-MC, Ready to put the pieces together," *Marine Corps Gazette*, August (2005): 20-22

Corps awarded two contracts: one to Oracle to provide the e-business suite of software applications and the other to Accenture LLC. to be the system integrator and to implement the software applications. Reengineering its logistical processes and systems has taken a great deal of time and effort for the Marine Corps<sup>7</sup>. Delarm and Eckert explain that the first step in acquiring new technology is to look at the requirements such as what does the tactical level need to place a requisition. Teams were created to "develop improved business processes and document information flows. The result was the logistics operational architecture (OA)..."<sup>8</sup> The OA enables the team to break down any step in the supply or logistical chain, to analyze it, and to improve upon the process. Understanding the process will allow analysts to see gaps in the current system.

The new process along with the new commercial off-the-shelf software, will change the acquisitioning, requisitioning, transporting, and storing process throughout the Marine Corps. The Marine Corps is investing so much time, effort, and money into this project because it is long overdue. In fact, the Marine Corps has convinced the Department of Defense of its importance. In March 2004, the Secretary of the Defense (OSD) designated GCSS-MC as an Acquisition Category 1AM (ACAT 1AM),

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<sup>7</sup> Randy F. Delarm & LtCol Ronald Eckert, "GCSS-MC, Ready to put the pieces together," *Marine Corps Gazette*, August (2005): 20-22

<sup>8</sup> Randy F. Delarm & LtCol Ronald Eckert, "GCSS-MC, Ready to put the pieces together," *Marine Corps Gazette*, August (2005): 20-22

meaning a program with special interest. The Marine Corps has only two projects given this high priority category. So why is that so important? It means the funding will be in place and more importantly, the right amount of attention will be placed on the program to ensure it is done right. Once this program is fully implemented, the end users will benefit from the new capabilities and their confidence in the supply chain will be restored.

### **Agility with a "Just-in-Time" System**

In the near future the Marine Corps will have systems in place to enable cutting the amount of logistics needed in theater as well as shrinking inventories at the intermediate level supply warehouses. These processes and systems will shorten the order-receipt time considerably due to the user-friendly web-based software. These processes also assist in removing many errors that occur in the present inadequate systems.

### **Back to basics, back to Doctrine**

This new software and the new process flow (Operational Architecture) of conducting logistics will not be the entire answer alone. Supply officers will need to continue ensuring that they have a small number of pre-expended bin items (PEB) so



that critical items are on hand. These emergency supplies will assist the main effort as it encounters the enemy and conducts fire and maneuver on the battlefields. Logisticians are meant to support the warfighter, not to slow or hinder him.

These basic fundamentals that are being promised by the LogMod are in line with doctrine. Of the seven principles of logistics, five directly support a "just-in-time" logistics system (responsiveness, economy, attainability, sustainability, and survivability). And while the other two principles (simplicity and flexibility) primarily support a "just-in-case" system, they also support the "just-in-time" system. *The Marine Corps Warfighting Publication 4-1* states<sup>9</sup>,

- **Responsiveness** is "...the **right** support in the **right** place at the **right** time." With a system in place such as GCSS-MC, the right assets will be quickly requisitioned and passed to the right place in a much more timely manner compared to today's system.
- **Economy** "...provides **sufficient support** at the **least cost** without impairing mission accomplishment or jeopardizing lives." The least cost, each unit deploying large stocks instead of relying on the system is contrary to our doctrine.

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<sup>9</sup>Marine Corps Combat Development Command, Doctrine Division, "Marine Corps Warfighting Publication 4-1, Logistics Operations" (1999)

- **Attainability** "...is the ability to provide the *minimum, essential supplies and services* required to begin combat operations." Similar to economy, attainability supports a small footprint of unit assets.
- **Sustainability** is the "...ability to *maintain logistics support* to all users throughout the area of operations for the duration of the operation." This principle focuses on ensuring the warfighter has what he wants and needs but only in appropriate amounts for the mission at hand.
- **Survivability** is the "...*capacity* of the organization to protect its forces and resources." The "iron mountain" is much more susceptible to enemy fires.
- **Simplicity**; "Establishment of priorities and pre-allocation of supplies and services by the supported unit can simplify logistics support operations."
- **Flexibility** "...includes the concept of alternative planning, anticipation, reserve assets, redundancy, [and] forward support of phased logistics..."<sup>7</sup>

Historically, the Marine Corps has leaned most heavily on the *Simplicity* and *Flexibility* principles, favoring the "just-in-case" system. However, the new LogMod programs will enable

the supply and logistic officers with a more responsive system that will work for the "customers" and not hindered them.

## **Conclusion**

Richard Kelly, LtGen.(Ret) stated that "We will operate in a collaborative, shared data environment knowing with greater accuracy where things are in the logistics chain and the status of order."<sup>10</sup> This quote describes the future of Marine Corps logistics. Because there will be skeptics, it needs to be emphasized and understood that LogMod is not ATLASS II+, nor is it a new SASSY or MIMMS. The Marine Corps reengineered the process itself and did not just make a newer version of an old system. For years "just-in-case" logistics has been the Marine Corps' more popular supply practice, but with Logistics Modernization and more education of what the new process flow will do for the consumer base, consumer confidence will be renewed in the Marine Corps Supply systems. The Marine Corps is about to see just how "just-in-time" logistics can lead to a lighter and leaner combat logistics support.

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<sup>10</sup> Richard L. Kelly, LtGen (Ret.) "Logistics Modernization :Lethality and Effectiveness." *Marine Corps Gazette* August (2005): 16-19

## Bibliography

- George Cahlink, "Just-in-Time War," *Government Executive*, Oct (2004): 30
- Randy F. Delarm & LtCol Ronald Eckert, "GCSS-MC, Ready to put the pieces together," *Marine Corps Gazette*, August (2005): 20-22
- Jacques Gansler "Gansler: DOD needs a new model for logistics Support," *Armed Forces Newswire Service* July 1999: 1.
- Jacques Gansler & Robert Luby, "Transforming Government Supply Chain Management," *Army AL&T* Jul/Aug (2003): 102
- Richard L. Kelly, LtGen (Ret.) "Logistics Modernization :Lethality and Effectiveness." *Marine Corps Gazette* August (2005): 16-19
- Richard L. Kelly, LtGen (Ret.) with Col Bob Ruark and Keith Rineaman, "The logistics Operational Architecture - Our Sand Table for Logistics Modernization," (2005) "proquest.com"
- Marine Corps Combat Development Command, Doctrine Division, "Marine Corps Warfighting Publication 4-1, Logistics Operations" (1999)
- U.S. Department of Defense, Office of the Under Secretary of Defense (Comptroller) March 1999 & February 2005 (Washington D.C.)